



Teacher Shortage Report for Missouri

December 2021

METHOD

The Missouri Department of Elementary and Secondary Education uses teacher qualification to identify the designated areas of critical shortage.

- Shortage areas were defined as those content areas within the state for which positions were filled with unqualified teacher(s) or left vacant due to the absence of qualified candidates.
- Unqualified teachers and total FTE count for each content area were compiled.
- Unqualified teachers by content area were determined by comparing the number of unqualified FTE to the total FTE count for each content area.
- The percentage FTE shortage by content area was determined by calculating the percentage of unqualified teachers per content area as compared to the total number of teachers in the state.
- A weighted value to represent the relative prominence of each content area was calculated as a percentage of the total FTE by content area as compared to the total number of teachers in the state.
- A weighted percentage of FTE shortage by content area was determined by multiplying the raw percentage FTE shortage by the weight of each content area.
- Consistent with the U.S. Department of Education Teacher Shortage Areas External User Guide, the sum of shortage areas was determined not to exceed 5% of the total number of FTE teaching positions within the state.

DATA SOURCES

- School districts in Missouri through the Missouri Student Information System (MOSIS), including educator core data, educator school, educator vacancy, and course assignment collections.
- Department of Elementary and Secondary Education's Educator Certification System.

DATA

- Unqualified teacher FTE by content area (statewide) defined as less-than-fully qualified personnel or left vacant.

ASSURANCES

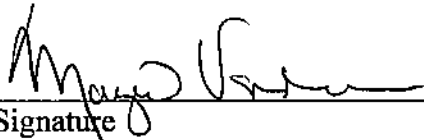
- Written objective standards were used in determining the proposed teacher shortage areas.
- Chief State School Officer's staff consulted with private non-profit school officers within the state.
- 2020-2021 data was used to determine the proposed teacher shortage areas.
- Chief State School Officer will provide an annual list of designated teacher shortage areas to all Chief Administrative Officers of the affected schools in Missouri.

CONTACT PERSON

Roy "Buddy" Alberson II, Assistant Director of Educator Preparation
Office of Educator Quality
Missouri Department of Elementary and Secondary Education
P.O. Box 480
Jefferson City, MO 65102-0480
573-751-1191
Buddy.Alberson@dese.mo.gov

CHIEF STATE SCHOOL OFFICER

Dr. Margie Vandeven
Commissioner of Education
Missouri Department of Elementary and Secondary Education



Signature

12-8-21
Date

- I. Name of State:**
a. Missouri
- II. Applicable School Year:**
a. Designations are for 2022-2023; data used were from the 2020-2021 academic year.
- III. Date Prepared:**
a. November 30, 2021
- IV. Total of all the FTE teaching positions within the state from 2020-2021 academic year: 71,705**
a. The number of unqualified or vacant FTE by content area throughout the state that represents 5.00% of the total FTE is 3,585.
- V. Shortage areas are listed by content area in order from most severe to least, as determined by MOSIS data:**

Five percent of total FTE

- | | |
|--|-------------------------------------|
| 1. Mild/Moderate Cross Categorical K-12 | 19. Social Science 9-12 |
| 2. Elementary Education 1-6 | 20. Instrumental Music K-12 |
| 3. Early Childhood Special Education B-3 | 21. Vocal Music K-12 |
| 4. Severe Development Disabled B-12 | 22. Chemistry 9-12 |
| 5. Early Childhood Education B-3 | 23. English Language Learners K-12 |
| 6. Physics 9-12 | 24. Special Reading K-12 |
| 7. Mathematics 5-9 | 25. Spanish K-12 |
| 8. Biology 9-12 | 26. Health K-12 |
| 9. General Science 5-9 | 27. Technology and Engineering 5-9 |
| 10. Art K-12 | 28. Technology and Engineering 9-12 |
| 11. Language Arts 5-9 | 29. Gifted Education K-12 |
| 12. English 9-12 | 30. Speech and Theatre 9-12 |
| 13. Mathematics 9-12 | 31. Business Education 5-9 |
| 14. Physical Education K-12 | 32. Agricultural Education 9-12 |
| 15. Business Education 9-12 | 33. Marketing 9-12 |
| 16. Family and Consumer Sciences B-12 | 34. Speech and Theatre 5-9 |
| 17. Earth Science 9-12 | 35. Agricultural Education 5-9 |
| 18. Social Science 5-9 | 36. Journalism 9-12 |

VI. Shortage areas are listed by content for the state in order from most severe to least, as determined by MOSIS data and represents 5.00% of the total FTE in the state:

Subject Area	FTE Unqualified	Shortage Indicator by Total FTE
MILD/MODERATE CROSS CATEGORICAL K-12	462.95	0.65%
ELEMENTARY EDUCATION 1-6	314.13	0.44%
EARLY CHILDHOOD SPECIAL EDUCATION B-3	263.24	0.37%
SEVERE DEVELOPMENT DISABLED B-12	233.02	0.32%
EARLY CHILDHOOD EDUCATION B-3	220.00	0.31%
PHYSICS 9-12	155.32	0.22%
MATHEMATICS 5-9	141.60	0.20%
BIOLOGY 9-12	114.00	0.16%
GENERAL SCIENCE 5-9	107.81	0.15%
LANGUAGE ARTS 5-9	103.62	0.14%
ENGLISH 9-12	99.63	0.14%
MATHEMATICS 9-12	99.12	0.14%
ART K-12	97.63	0.14%
PHYSICAL EDUCATION K-12	95.59	0.13%
BUSINESS EDUCATION 9-12	94.49	0.13%
FAMILY AND CONSUMER SCIENCES B-12	90.67	0.13%
INSTRUMENTAL MUSIC K-12	82.17	0.11%
EARTH SCIENCE 9-12	81.64	0.11%
SOCIAL SCIENCE 5-9	80.36	0.11%
SOCIAL SCIENCE 9-12	80.30	0.11%
VOCAL MUSIC K-12	75.82	0.11%
CHEMISTRY 9-12	74.20	0.10%
ENGLISH LANGUAGE LEARNERS K-12	66.97	0.09%
SPECIAL READING K-12	53.71	0.07%
SPANISH K-12	48.08	0.07%
HEALTH K-12	40.99	0.06%
GIFTED EDUCATION K-12	24.66	0.03%
SPEECH AND THEATRE 9-12	24.66	0.03%
BUSINESS EDUCATION 5-9	23.31	0.03%
TECHNOLOGY AND ENGINEERING 5-9	23.19	0.03%
AGRICULTURAL EDUCATION 9-12	18.28	0.03%
TECHNOLOGY AND ENGINEERING 9-12	17.55	0.03%
MARKETING 9-12	12.17	0.02%
SPEECH AND THEATRE 5-9	10.43	0.01%
AGRICULTURAL EDUCATION 5-9	8.00	0.01%
JOURNALISM 9-12	7.55	0.01%
Above content areas represent 4.94% of total FTE		